

## **NASA Occupational Health Promoting Nutrition at NASA Centers**

### **1. Purpose**

The NASA Occupational Health Program is committed to continually improving the health of Agency employees. Recommendations are provided for promoting health and good nutrition in the workplace. They include guidelines for increasing awareness, offering health education and providing environmental support.

Nutrition plays a major role on employee health and well-being. Poor nutrition contributes to risk factors such as obesity, high blood pressure, and high cholesterol, which are associated with chronic diseases. Five of the ten leading causes of death, including heart disease, arteriosclerosis, stroke, cancer and diabetes, are linked to nutrition.

Creating an environment within the Agency that supports good health practices and nutrition are an important part of the efforts to improve health and to create an organizational culture that supports employee health and well-being. The benefits to the Agency include the potential for increased productivity, decreases in absenteeism, benefit costs, human resource and developmental costs, and an improved image of the organization.

### **2. Employee Committee**

The formation of an employee committee to support the health promotion activities is recommended to enhance program ownership and involvement. The committee membership should include representatives from different employee groups, including management and union, and the vendor contractor manager. Leadership for the committee should be provided by the Occupational Health Program and could be an Occupational Health Nurse, Physician or Fitness Center professional. The committee is responsible for tailoring the health promotion activities to their worksite. Development of a plan by the committee should include the program goals and objectives, planned activities, promotion strategies, implementation schedule and program evaluation.

### **3. Health Promotion**

There are three recommended levels of health promotion activities for NASA Centers. The first is to increase the level of awareness within the NASA Center workforce of the impact nutrition plays in health and well-being. Second, Center employees should be provided with opportunities for health education aimed at increasing knowledge on nutrition and provided tools to help facilitate behavioral change. Third, the NASA Centers should have an environment that supports good health practices by insuring employees have healthy food selections available to them in Center cafeterias and vending machines.

### **3.1 Increasing Awareness**

The first step in your health promotion plan should be to increase awareness about nutrition and its relationship to health. Methods that can be utilized to create awareness include:

- Posters
- Newsletters
- Nutritional Labeling
- Brochures
- Pamphlets
- Bulletin Boards
- Center Media Sources
- Health Fair
- National Nutrition Month

### **3.2 Health Education**

Opportunities for health education can be provided utilizing two program types, knowledge and skill based. Knowledge based programs provide employees information about nutrition and its role in disease prevention. Skill based programs provide tools to help employees make positive behavioral changes aimed at reducing risk and enhancing health & well-being. Programs can be delivered by the Occupational Health Program staff or outside speakers. Program suggestions include:

- Knowledge Based Programs  
Methods: self-paced materials, educational sessions such as Lunch 'n Learn, and videos  
Topics: Understanding the Food Pyramid, Healthy Heart
- Skill Based Programs  
Methods: demonstrations, self help-materials and tools, and educational sessions  
Topics: Reading Labels, Modifying Recipes
- Support Groups

### **3.3 Environmental Support**

Environmental support offered in the NASA Centers will create the support structure needed for maintaining behavioral changes by ensuring the availability of healthy choices in the cafeteria and vending machines. In addition, this approach has the potential for reaching all employees and yielding a greater health promotion impact, as well as, enhancing an organizational culture supportive of good health practices.

The Occupational Health Program can facilitate environmental changes within the Centers by collaborating with the food service vendor and food service contract manager. The Occupational Health Program staff or employee committee can coordinate with and support the cafeteria awareness activities with the food service vendor.

Recommendations for food service contract requirements include:

1. Providing a variety of low-fat, low sodium and high fiber healthy choices in the cafeteria. Minimum requirements include the following recommendations:

<b>Food Service Nutrition Checklist</b>		
		Requirements/Suggestions
Bread	Cereal	Low in sugar, High in fiber
	Bread, Rolls, Bagel	Whole grains
	Rice, Pasta	
Fruit	Fresh Fruit	Raw, canned without sugar, lite
	Fruit Juice	Unsweetened
Dairy	Milk	Skim or 1-2%
	Yogurt	Low fat
	Cottage Cheese	1%
	Cheese	Low or reduced fat
Fats	Margarine	Low fat, whipped
	Mayonnaise	Low fat or fat free
	Salad Dressing	Low fat
Protein	Cold Cuts	Low-fat, AHA Healthy Choice
	Tuna	Water packed
	Fish	Baked, broiled, poached
	Meats	Lean cuts
	Poultry	Without skin
	Beans	Fresh, dried, frozen, reduced sodium canned
Vegetables	Vegetables	Frozen, reduced sodium canned
	Salad Bar	

2. Offering healthy choices for catered meetings or Agency sponsored events.
3. Offering one healthy hot entrée with a total fat content of less than 30% of total calories, saturated fat of less than 8-10% of calories, cholesterol of less than 150 mg. and sodium of less than 1000 mg.
4. Providing nutritional labeling at the point of service for all hot entrée selections at the point of choice including the total calories, % of calories from fat, total fat, total saturated fat and cholesterol.
5. Labeling at the point of choice low-fat and high fiber selections offered at salad, soup and sandwich bars.

6. Utilizing products certified as *Healthy Heart* by the American Heart Association (AHA).
7. Modifying recipes to lower total overall fat content and total saturated fat, cholesterol and sodium, i.e. use of Butter Buds.
8. Modifying food preparation by utilizing cooking methods that do not add fat, i.e., baking, broiling and boiling, trimming fat from meat, removing skin from poultry and minimizing the use of gravy and sauces.
9. Promoting selection of healthy food choices by utilizing a theme such as Healthy Heart, "Just For You" or other nutritional campaigns.
10. Posting a permanent display of nutrition information including the Food Pyramid and Dietary Guidelines for Americans.
11. Offering low calorie, low fat and high fiber snacks in the Centers' vending machines. Recommended selections include:

Vending Machines Checklist	
Dried fruit	Nuts, almonds, walnuts
Ice tea, unsweetened	Raisins
Juice, unsweetened fruit	Soda, diet
Microwave popcorn, plain	Sunflower seeds, unsalted
Milk, skim or low-fat	Water, bottled

#### 4. Program Evaluation

Evaluating the impact of health promotion activities within the Agency is an essential component of your program. In the planning stage, the short and long term program goals should have been established. The evaluation data you collect should be helpful in determining the effectiveness of your program and any need to make program modifications. Metrics for program evaluation might include:

- Process Evaluation Measures
  - Types and number of activities
  - Participation rates
- Impact Evaluation Measures
  - Program participation rates
  - Employee satisfaction
  - Quality of program content and facilitators
- Outcome Evaluation
  - Increases in awareness and knowledge
  - Indicators of behavioral change
  - Types of environmental changes

## 5. Resources

The following list of recommended resources are provided to the Occupational Health Program staff to support nutritional efforts at the Centers. Resources identified include on-line and written resources, posters and nutrition promotional themes. These resources can be utilized for awareness activities, educational programs and environmental efforts. Some of the on-line resources can be added to Centers web sites for employee use.

### 5.1 On-line Resources

Resource	Cost
American Heart Association's <i>Heart @ Work Online</i> provides the program coordinators guide online including materials and modules on health promotion, physical activity, nutrition, health & weight manage, blood pressure, smoking avoidance, risk assessment, etc. Web address is <a href="http://www.americanheart.org">www.americanheart.org</a>	Yes
American Heart Association's <i>One of a Kind Program</i> is a health improvement and disease management system that includes assessment surveys, behavioral change books, newsletters, etc. Provides employee information on nutrition, smoking, cholesterol, physical activity, etc. Web address is <a href="http://www.americanheart.org">www.americanheart.org</a>	Yes
American Medical Association's Interactive Health, <i>Personal Nutritionist</i> is an interactive web site that provides nutrition and weight assessments and a variety of nutritional information. Web address is <a href="http://www.ama-assn.org/insight/yourhlth/pernutri/pernutri.htm">www.ama-assn.org/insight/yourhlth/pernutri/pernutri.htm</a>	No
National Health, Lung & Blood Institute's National Cholesterol Education Program Kit 99: <i>Keep the Beat—Cholesterol Counts for Everyone</i> is an online health promotion kit for professionals that includes program suggestions, written information, Healthy Heart recipes, web sites, etc. Web address is <a href="http://www.nhlbisupport.com/cholmonth/cho-Kit.htm">www.nhlbisupport.com/cholmonth/cho-Kit.htm</a>	No
National Health, Lung & Blood Institute's <i>Live Healthier Live Longer: Lowering Cholesterol for the Person with Heart Disease</i> is an online interactive site for individuals with heart disease. The site includes information on coronary heart disease, cholesterol, resource list, etc. Web address is <a href="http://www.nhlbi.nih.gov/chd/">www.nhlbi.nih.gov/chd/</a>	No
Vitality Online provides information on a wide variety of nutrition topics. Web address is <a href="http://www.vitality.com">www.vitality.com</a>	No

**5.2 Posters**

<b>Agency</b>	<b>Poster Title</b>	<b>Available Online</b>	<b>Cost</b>
American Dietetic Association 216 W. Jackson Blvd. Chicago, IL 60606-6995 312-899-0040	Nutrition Food Pyramid	Order online <a href="http://www.eatright.org">www.eatright.org</a>	Yes
Health Edco PO Box 21207 Waco, TX 76702-1207 800-299-3366, ext. 295	Reading Food Labels	No	Yes
Krames/Staywell 1100 Grundy Lane San Bruno, CA 94066-3030 800-333-3032	Good Nutrition Nutrition Food Pyramid How Healthy Is Your Diet? Healthy Eating On The Run	Order online <a href="http://www.staywell.com">www.staywell.com</a>	Yes
US Dept of Agriculture Washington, DC	Nutrition Food Pyramid	Yes <a href="http://www.usda.gov/cnp/p/">www.usda.gov/cnp/p/</a>	No

**5.3 Written Materials**

<b>Agency</b>	<b>Type/Title</b>	<b>Available Online</b>	<b>Cost</b>
American Dietetic Association 216 W. Jackson Blvd. Chicago, IL 60606-6995 312-899-0040	<i>Brochure</i> /The Food Guide Pyramid  <i>Fact Sheet</i> /Multiple Nutrition Resources	Order online <a href="http://www.eatright.org/nfs/">www.eatright.org/nfs/</a>	Yes
American Heart Association National Ctr 7272 Greenville Avenue Dallas, TX 75231-4596 800-242-8721  www.amhrt.org	<i>Booklets</i> / An Eating Plan for Healthy Americans Nutritious Nibbles Savor the Flavors: How to Choose Healthful Meals when Dining Out Nutrition for Fitness Recipes for Low-Fat, Low-Cholesterol Meals	No	Yes
Health Edco PO Box 21207 Waco, TX 76702-1207 800-299-3366, ext. 295	<i>Booklets</i> / A Common Sense Approach to Nutrition Easy-Reading Food Label Booklet	No	Yes
Hope Publications 350 E. Michigan Ave. Suite 301 Kalamazoo, MI 49007-3851 800-334-4094, ext. 1590	<i>Booklet</i> /Food for Thought  <i>Brochures</i> / Food Labels: How to use them Food Guide Pyramid: How to use it Healthy Brown Bag Lunches	Order online <a href="http://www.hithope.com">www.hithope.com</a>	Yes
Krames/Staywell 1100 Grundy Lane San Bruno, CA 94066-3030 800-333-3032	<i>Brochures</i> / The Food Pyramid Reading Food Labels Nutrition	Order online <a href="http://www.krames.com">www.krames.com</a>	Yes
Johnson & Johnson Health Care Systems 425 Hoes Lane, Rm. 2264-F Piscataway, NJ 08866-6800 800-4JNJHCS	<i>Booklets</i> / Developing an Awareness of Good Nutrition Making Sense of Food Labels Dining Out-Healthfully	No	Yes
US Dept of Agriculture Washington, DC	<i>Booklet</i> / Dietary Guidelines for American Program/Using the Food Guide Pyramid: A Resource for Nutrition Educators	Order online <a href="http://www.nal.usda.gov/fnic/dga/dga95.html">www.nal.usda.gov/fnic/dga/dga95.html</a>	Yes  No
Vitality 8080 North Central, LB 78 Dallas, TX 75296-1818 800-554-0015	<i>Brochure</i> /Eating for your Health <i>Booklet</i> /Nutrition <i>Pamphlet</i> /The Food Pyramid	No	Yes

#### 5.4 Campaign Themes

Resource	Cost
The American Dietetic Association's National Nutrition Month 1999 theme <i>Take a Fresh Look at Nutrition</i> includes a wide variety of items such as posters, table tents, incentives, etc.	Yes
The American Heart Association's <i>Healthy Heart</i> theme includes resources in their Heart at Work Program.	Yes
The Dietary Guidelines Alliance's <i>It's All About You</i> provides a message campaign and logo.	No